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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/660,670 | 09/12/2003 | Josephus A.E.P. van Engelen | 1875.4690000 | 7574 |

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| EXAMINER | |
|---|---|
| ZAMAN, FAISAL M | |
| ART UNIT | PAPER NUMBER |
| 2112 | |

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/660,670 | VAN ENGELEN ET AL. | |
| | Examiner | Art Unit | |
| | Faisal Zaman | 2112 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *28 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-16 and 18-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16 and 18-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments, see pages 7-10, filed 25 January 2006, with respect to the rejection(s) of claim(s) 1, 2, 15, 16, 18, and 19 under 35 U.S.C. 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Johnson (U.S. Patent No. 5,264,958), Okazaki et al. (U.S. Patent Application Publication No. 2004/0103219), and Oprescu et al. (U.S. Patent No. 5,559,967).

### *Claim Objections*

2. Claim 15 recites the limitation "the third and fourth pins" in lines 6 and 9. There is insufficient antecedent basis for this limitation in the claim.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claim 1** is rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (U.S. Patent No. 5,264,958).

Johnson discloses a serial data interface system (Figure 1, item 18 and Figure 3, Column 3, lines 57-68) comprising:

A first transceiver (Figure 3, item 28 with item 33, Column 4 line 67 – Column 5 line 34) configured to comply with a first standard (Column 5, lines 18-22; ie. the V.35 standard) coupled to a set of pins (Figure 3, item 20, Column 4, lines 33-37); and

A second transceiver (Figure 3, item 28 with item 35, Column 4 line 67 – Column 5 line 34) configured to comply with a second standard (Column 5, lines 18-22; ie. the X.21 standard) coupled to the set of pins.

### *Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson, in view of Okazaki et al. ("Okazaki") (U.S. Patent Application Publication No. 2004/0103219).

Johnson discloses the system of Claim 1 as described above.

Johnson does not expressly disclose wherein the first standard is IEEE 1394-1995/1394a-2000 standard; and the second standard is IEEE 1394b-2002 standard.

In the same field of endeavor (e.g. mutual transmission/reception of data being realized among networks with different standards from each other), Okazaki teaches the common use of the IEEE 1394-1995/1394a-2000 and IEEE 1394b-2002 standards (Okazaki, Page 2, paragraph 0031).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Okazaki's teachings of mutual transmission/reception of data being realized among networks with different standards from each other with the teachings of Johnson, for the purpose of increasing compatibility among devices that comply with the IEEE 1394-1995/1394a-2000 and IEEE 1394b-2002 standards, which are well known to have much faster data transfer rates than the standards used in Johnson.

***Claim Rejections - 35 USC § 103***

7. **Claims 3-15 and 21-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson, in view of Oprescu et al. ("Oprescu") (U.S. Patent No. 5,559,967).

Johnson discloses the system of Claim 1 as described above.

**Regarding Claim 3**, Johnson does not expressly disclose wherein the first transceiver device comprises: a twisted-wire pair (TP) bias section; a first TP transceiver section; and a second TP transceiver section.

In the same field of endeavor (e.g. a dynamic, multi-speed bus architecture for enabling multi-speed data transfers on a bus having variable speed and fixed speed nodes connected thereto) Oprescu teaches wherein a first transceiver device (Oprescu, see figure 19, transceiver 14 and column 17 lines 2-12) comprises: a twisted-wire pair (TP) bias section; a first TP transceiver section; and a second TP transceiver section (Oprescu, see figure 19 and column 4 lines 7-11).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Oprescu's teachings of a dynamic, multi-speed bus architecture for enabling multi-speed data transfers on a bus having variable speed and fixed speed nodes connected thereto with the teachings of Johnson, for the purpose of providing a method and apparatus for the transfer of speed messages on a multi-speed bus independent of the data signal transfers (see Oprescu, Column 2, lines 16-19). Johnson also provides motivation to combine by stating it is an object of the invention to provide a more efficient interface subsystem for use with a business machine for use in a communication or data network which is able to interface with one of a plurality of electrical interface standards (see Johnson, Column 2, lines 33-38).

**Regarding Claim 4**, Oprescu teaches the following limitation, which Johnson does not expressly disclose: wherein the TP bias section comprises: a TP bias device; and a connection detection device (Oprescu, see figure 4 and column 3 lines 29-31).

The motivation utilized in the combination of Claim 3, super, applies equally as well to Claim 4.

**Regarding Claims 5-8**, Oprescu teaches the following limitation, which Johnson does not expressly disclose: wherein the first TP transceiver section comprises:

A strobe signal device; a data signal device; an arbitration signal device; and a speed detection device (Oprescu, see figure 3A).

The motivation utilized in the combination of Claim 3, super, applies equally as well to Claims 5-8.

**Regarding Claims 9-14**, Oprescu teaches the following limitation, which Johnson does not expressly disclose: wherein the second transceiver comprises: a transmitter section coupled to the second pin; and a receiver section coupled to the first pin (Oprescu, see figures 3A-3B, 4, 13, 19).

The motivation utilized in the combination of Claim 3, super, applies equally as well to Claims 9-14.

**Regarding Claim 15**, Johnson discloses a serial data interface system (Johnson, Figure 1, item 18 and Figure 3, Column 3, lines 57-68), comprising:

A first section (Johnson, Figure 3, item 28 with item 33, Column 4 line 67 – Column 5 line 34) configured to comply with a first standard (Johnson, Column 5, lines 18-22; ie. the V.35 standard); and

A second section (Johnson, Figure 3, item 28 with item 35, Column 4 line 67 – Column 5 line 34) configured to comply with a second standard (Johnson, Column 5, lines 18-22; ie. the X.21 standard).

Johnson does not expressly disclose wherein the first section includes, a TPBIAS device section coupled to first and second pins (through additional circuitry), a first transceiver section coupled to the first and second pins, and a second transceiver section coupled to the third and fourth pins, and the second section configured to

comply with a second standard including, a signal transmitting device coupled to the third and fourth pins, and a signal receiving device coupled to the first and second pins.

In the same field of endeavor, Oprescu teaches a first section (Oprescu, first node 21) configured to comply with a first mode including, a TPBIAS device section coupled to first and second pins (through additional circuitry), a first transceiver section coupled to the first and second pins (Oprescu, see figure 19, transceiver 14, signals 40, 41), and a second transceiver section coupled to the third and fourth pins (Oprescu, see figure 19, transceiver 18, signals 42, 43), and a second section (Oprescu, second node 23) configured to comply with a second mode including, a signal transmitting device coupled to the third and fourth pins, and a signal receiving device coupled to the first and second pins (Oprescu, see figure 19, node 23 coupling to signals 41-43).

The motivation utilized in the combination of Claim 3, super, applies equally as well to Claim 15.

**Regarding Claims 21-24**, Oprescu teaches the following limitation, which Johnson does not expressly disclose: wherein the first transceiver comprises: a bias section; a first transceiver section; and a second transceiver section (Oprescu, see figures 3A, 9).

The motivation utilized in the combination of Claim 3, super, applies equally as well to Claim 21-24.

***Claim Rejections - 35 USC § 103***

8. **Claim 16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Oprescu (hereinafter "Johnson-Oprescu") as applied to Claim 15 above, in further view of Okazaki.

Johnson-Oprescu discloses the system of Claim 15 as described above.

Johnson-Oprescu does not expressly disclose wherein the first standard is IEEE 1394-1995/1394a-2000 standard; and the second standard is IEEE 1394b-2002 standard.

In the same field of endeavor (e.g. mutual transmission/reception of data being realized among networks with different standards from each other), Okazaki teaches the common use of the IEEE 1394-1995/1394a-2000 and IEEE 1394b-2002 standards (Okazaki, Page 2, paragraph 0031).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Okazaki's teachings of mutual transmission/reception of data being realized among networks with different standards from each other with the teachings of Johnson-Oprescu, for the purpose of increasing compatibility among devices that comply with the IEEE 1394-1995/1394a-2000 and IEEE 1394b-2002 standards, which are well known to have much faster data transfer rates than the standards used in Johnson-Oprescu.

**Claims 18-20** are directed to a method of the system of Claims 1-14. Johnson, Okazaki, and Oprescu teach, either alone or in combination as described above, the

system of Claims 1-14. Therefore, Johnson, Okazaki, and Oprescu also teach the method of Claims 18-20.

***Prior Art of Record***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fotouhi (U.S. Patent No. 6,037,828) discloses a transmission line driver with high output impedance at power off. Abler et al. (U.S. Patent Application Publication No. 2003/0067884) discloses dynamic detection of LAN network protocol. DiDomenico et al. (U.S. Patent Application Publication No. 2004/0218052) discloses a method and system for video capture of vehicle information. Baker et al. (U.S. Patent Application Publication No. 2005/0021890) discloses a multi-functional port. Dove (U.S. Patent Application Publication No. 2005/0036506) discloses an apparatus and method for automatically switching media connections when operating in forced speed and duplex mode.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faisal Zaman whose telephone number is 571-272-6495. The examiner can normally be reached on Monday thru Friday, 8 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached on 571-272-3676. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

fmz

JOHN R. COTTINGHAM
PRIMARY EXAMINER